Remarks

By this amendment, claim 5 has been canceled to avoid the Examiner objecting to claims 5 and 9 being substantial duplicates of each other. Claim 18 has been canceled. Claims 1, 9 and 15 have been amended to correct an inconsequential typographical error.

Claims 1 – 4, 6 – 17, and 19 remain in the application.

Claims 1 – 4, 6 – 8, and 17 – 19 have been rejected under 35 USC 103(a) for being unpatentable over Neroda et al (US 4,315,343) in view of Kiefer et al. (US 3,875,462) in view of Yartz et al. (US 3,159,354). The Examiner states that it would have been obvious to modify the motor of Neroda in view of Kiefer and Yartz.

The applicant respectfully disagrees with the rejection for the following fundamental reasons:

1) Neroda discloses a double-insulated motor and suggests no need for grounding. In fact, the Neroda motor deliberately includes an electrically insulated tube 83 between rotor shaft 48 and bearing 61 (col. 3, lines 51 – 62). Modifying Neroda to include an electrical ground path between shaft 48 and bearing 61 would destroy the intended purpose of tube 83. The applicant's claims specifically recites, "a metal bearing retainer engaging the inboard bearing such that electrical continuity is established between the rotor and the metal bearing retainer."

2) Neroda, Yartz, and Kiefer fail to disclose a ground strap compressed between a stator and a plastic housing. Neroda fails to identify any ground strap, and the stators of Yartz and Kiefer are potted or encapsulated. Since the stators of Yartz and Kiefer are cast within an epoxy or some other cast material, it would seem that by the very nature of a casting process such a design could not compress a ground strap between the stator and the cast material. The applicant specifically claims a

tie rod that clamps the stator between a plastic housing and a plastic bracket to hold a ground strap in compression.

3) It appears to the applicant that the ground strap of the Yartz motor has distal ends engaging the stator and a central point engaging the bearing. The applicant, on the other hand, claims three points for three distinct functions: 1) an attachment end engaging the bearing retainer, 2) a central portion engaging the stator, and 3) a terminal end to provide a groundable connection to the stator and rotor.

The applicant's responses to more specific claim rejections are as follows:

1) Regarding claim 2, the applicant points out that the cited references do not disclose a tie rod that extends through a ground strap and clamps the stator between a plastic housing and a plastic bracket.

2) Regarding claim 3, the cited references do not disclose a tie rod that threads into a plastic housing which in turn clamps the stator between the housing and a plastic bracket.

3) Regarding claim 4, the Examiner refers to end tab 49 of Yartz as a "central portion;" however, tab 49 is at a distal end of strap 46.

4) Regarding claim 6, the Examiner suggests that Yartz teaches a slot that has a depth greater than the material thickness of the strap. Even if that were true, Yartz does not explain how a slot of such depth could possibly hold a strap in compression.

5) Regarding claim 7, the bearings of Neroda and Yartz appear to be held in place without rivets or rivet-like fasteners, so apparently there is no need to do so. No explanation has been given to describe how a rivet can be held within a blind hole, such as the blind hold in which the screw of Kiefer extends.

6) Regarding claim 19, the Examiner states that the applicant's specification does not disclose what utilitarian purpose there is to fastening the air guide to the plastic housing with the bearing retainer fasteners as opposed to other fastening configurations. However, on page 4 lines 13 and 14 of the applicant's specification, the Summary of the Invention states that an object of some embodiments is to have multiple parts share a common fastener. Thus, the utilitarian purpose is to provide a motor with fewer components to assemble.

7) Regarding claim 5, the Examiner states that it would be obvious to provide the ground strap of Yartz with a crushable curved surface as taught by Suzuki et al (US 4,798,984). The applicant, however, cannot see how Yartz can possibly have a crushable curved surface because the Yartz ground strap is potted or encapsulated in a cast material such as epoxy (Yartz, col. 1, lines 28 – 31).

Claims 9 – 16 have been rejected under 35 USC 103(a) as being unpatentable over Neroda in view of Kiefer in view of Yartz in view of Susuki. The applicant disagrees with the rejection as follows:

1) Regarding claims 9 and 14 – 16, grounding the rotor shaft of Neroda destroys the intended purpose of Neroda's insulation tube 83, and the potted or encapsulated stators of Kiefer and Yartz makes a crushable grounding strap therein virtually impossible, thus it would not be obvious to modify Neroda, Kiefer or Yartz according to Susuki.

2) Regarding claim 10, Kiefer and Yartz have potted or encapsulated stators, thus they have no need for a tie rod. Neroda specifically teaches an end bell 43 made of zinc or metal for conducting heat away from the armature shaft (see Neroda, col. 2, line 63). The Examiner has not pointed out where Suzuki may have a tie rod.

3) Regarding claim 11, the Examiner refers to end tab 49 of Yartz as a "central portion;" however, tab 49 is at a distal end of strap 46.

4) Regarding claim 12, the Examiner states that it would be obvious to provide the ground strap of Yartz with a crushable curved surface as taught by Suzuki et al (US 4,798,984). The applicant, however, cannot see how Yartz can possibly have a crushable curved surface because the Yartz ground strap is potted or encapsulated in a cast material such as epoxy (Yartz, col. 1, lines 28 – 31).

5) Regarding claim 14, the Examiner's arguments seem to apply to claim 13 which pertains to the rivet. The applicant submits that the bearings of Neroda and Yartz appear to be held in place without rivets or rivet-like fasteners, so apparently there is no need to do so. No explanation has been given to describe how a rivet can be held within a blind hole, such as the blind hold in which the screw of Kiefer extends.

Consequently, the applicant submits that the applicant's invention as claimed is neither anticipated nor obvious in view of the cited art. The Examiner, therefore, is respectfully requested to allow claims 1 – 4, 6 – 17, and 19.

Respectfully submitted,

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